SHARK Collection Phase

From	То
George Robin/R9/USEPA/US	David Albright/R9/USEPA/US@EPA
cc	BCC
Subject	Date/Time
Re: Canby Geothermal Injection Project	03/27/2012 08:13 AM

## **Item Body**

Thanks David,

See my response in red, below.

I had a quick call with them yesterday. They will make minor edits and send their letter. I will draft our reply letter.

## George

David Albright---03/26/2012 03:32:43 PM---George, They include the following sentence in the letter, the bolded section seems a little confusi

From: David Albright/R9/USEPA/US
To: George Robin/R9/USEPA/US@EPA

Date: 03/26/2012 03:32 PM

Subject: Re: Canby Geothermal Injection Project

# George,

They include the following sentence in the letter, the bolded section seems a little confusing to me - "The proposed project would pump a low-temperature geothermal fluid from a production well through a heat exchanger **to be used in several direct-use applications yes, they avoided listing the whole thing out and those details** before the fluid would be injected back into the same geothermal reservoir.

What is "to be used in several direct-use applications" before being injected back in to the reservoir (extracting heat - using it - directly)? I presume the produced fluid, but then that does not sound like they are merely removing heat, as they otherwise suggest. They do not "suggest" - they clearly state they are simply removing heat, and that no contaminants will be introduced....

Second, when we prepare our written response, we will need to stress the fact that the injection must not violate 144.12 of the UIC regulations (or whatever the analogue is at the state level). That is the real test here - if injection (for oil, gas, geothermal, mineral solution mining, etc.) will result in a violation of 144.12, then the only way it can be authorized is by exempting the

aquifer. Conversely, if the injection will not violate 144.12, an aquifer exemption is not needed. **correct, no aquifer exemption is necessary here and similar heat exchange operations**So, even though we want to be clear about all the assumptions and the detailed facts of this situation (and similar ones), we need to include language from 144.12 as the true backstop.

yes, and as I requested, we should do it in a broad sense - not specific to Canby. Let me know otherwise.

T	hai	nl	ks,	,
D	av	ic	ı	

\*

David Albright Manager, Ground Water Office

USEPA, Region IX Phone: 415.972.3971 75 Hawthorne Street Fax: 415.947.3549

Mail Code: WTR-9 Email: albright.david@epa.gov

San Francisco, CA 94105

\*

George Robin---03/26/2012 02:57:17 PM---David, This looks like what Liz and I were discussing last Thursday. I asked them for a draft lette

From: George Robin/R9/USEPA/US
To: David Albright/R9/USEPA/US@EPA

Date: 03/26/2012 02:57 PM

Subject: Re: Canby Geothermal Injection Project

#### David,

This looks like what Liz and I were discussing last Thursday. I asked them for a draft letter that we could address specifically (to the Canby District) as well as more broadly, so that we will not need to address similar projects separately.

Further Suggestions for their letter:

- Please refer specifically to the Canby District's operations as well as the Division's intent to apply these principles to other similar type geothermal applications.
- Please make clear that the operation will be permitted (you use regulating in the first sentence of the second paragraph, which essentially may mean the same thing). Thus, the third paragraph could use the word "permit/permitting/etc." (as applicable) in the first sentence to include "investigation and monitoring" within a permitted context.
- the phone number for Liz in the heading should stop at 916/323-1786 (four extra digits show up there)

Do you have any further thoughts?

I will be discussing with them briefly this afternoon and will inform them you are examining it before we provide feedback.

## George

"Truschel, Jack" ---03/26/2012 02:14:33 PM---Hi George,

From: "Truschel, Jack" < Jack. Truschel@conservation.ca.gov>

To: George Robin/R9/USEPA/US@EPA

Cc: "Johnson, Liz" <Liz.Johnson@conservation.ca.gov>

Date: 03/26/2012 02:14 PM

Subject: Canby Geothermal Injection Project

## Hi George,

Sorry I missed you last week. I made some edits to the draft letter that Liz sent to you and have attached it for your review. Includes a little more detail but not significantly different than the one you reviewed and commented on earlier today by Liz's voice mail.

Anyway, Liz and I can give you a call at 3:00P today and we can discuss any additional comments you may have.

Thanks again for your help with this.

Best regards,

Jack Truschel Geothermal District Engineer Division of Oil, Gas, & Geothermal Resources 801 K Street, Sacramento, CA 95814 916.323.1787

Email: jtrusche@consrv.ca.gov

[attachment "Draft epa letter canby.docx" deleted by George Robin/R9/USEPA/US]